AD-A286 986

Amendment
For
Install Modular Manufacturing Works Teams
At
A DAM





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Prepared by Charles Gilbert Associates, Inc.

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# **ADMENDMENT TO:**

# INSTALL MODULAR MANUFACTURING WORK TEAMS AT A DAM, PHASE II CGA PPFG T1-P1 Final Report

The attached memo was sent from Mr. Stew Stewart to Mr. Gus Piccinini on July 23, 1998, for his review and to settle concerns that he may have from the metrics stated in the Final Report. Mr. Piccinini didn't respond to the memo until an arranged meeting on September 29<sup>th</sup> with Mr. Jim DellaPolla. Mr. Piccinini had the following statements and concerns about the Installation of Modular Work Teams in his factory. The bold print is Mr. Piccinni's statement and the non-bold is a clarification or response to that statement.

1. Three Teams, #'s 4, 5 & 6, were not considered Live because they have yet to perform on their own

These teams were ready to go live last June, but Mr. Piccinini was not comfortable with the configuration of the Teams Expected Pay and Cost. This is a very important issue that Maryland Clothing was expected to finalize and set the Teams Live. However, before they could maneuver some changes had taken place in the teams that caused even more concern for Mr. Piccinini. At this point it's felt that Mr. Stewart should help Maryland Clothing to re-configure these teams on the Payroll Sheets so the Expected Pay and Cost can be set to satisfy Mr. Piccinini. Mr. Stewart should be able to offer this assistance without additional expense to the project or trips to Maryland.

2. Individuals within a team have to be adjusted in pay because their actual performance is greater than their expected pay within the team.

This is a technique that drives cost up because no adjustments are being made downward only higher. Also, CHARLES GILBERT ASSOCIATES do not endorse this technique after a team is set Live, although some team adjustments could be expected but not on a continuous basis.

Mr. Piccinini wants the Payroll Procedures to be modified so that Individual responsibility is figured into Team split dollars. He feels the following criteria should drive the pay procedures:

- Units that the Team produces.
- Individual Responsibilities
- Posting Individual's as well as Team Performances
- Daily Reward for reaching Goal and finishing early.

These modifications are not considered to be the best drivers for Team performances, however, Mr. Piccinini is making some of these adjustments manually and if he insists on the modifications then Mr. Stewart will assist Maryland Clothing. CHARLES GILBERT ASSOCIATES must be compensated for Mr. Stewart's actual time and expenses.

3. Cost per coat increased by \$1.00 from 1996 to 1997 and by \$0.41 from 1996 to projected 1998 with stated savings of \$1.15 per coat due to improvements made by Maryland Clothing.

Mr. Piccinini stated his Total Cost had increased excluding any overhead and salary personnel. Vacation and Holiday dollars are included as well as two hourly increases of \$0.15 in Oct. 1997 and \$0.20 in Oct. 1998. Improvements made possible in methods by Maryland Clothing reduced personnel requirements by 6.5 people which were converted to \$1.15 per coat.

The metrics stated in the final report, are for specific periods of time such as the Quarter before the start of the project compared to the Month at the end of the project. It has been well documented that Maryland's cost would increase during the project and Maryland Clothing has been compensated for the Lost Labor and Training cost during the project. The excess dollars for the project in the first half of 1998 should not be prorated and projected to continue in the later part of 1998. The final report did not state that all reduced costs were strictly by converting to teams, it just stated the cost before and at completion. It should be understood that proper engineering and managerial procedures continue even with the team concepts.

Teams concepts normally do not reduce Standard Time, however they do allow a vehicle if the right avenue is available to pursue improvements and changes in the standards.

### 4. Absenteeism decreased from 1996 to 1997 but has a projected increase for 1998.

Mr. Piccinini stated that his total hours absent were 6681.25 during 1996 and his average employment was 122, which equals 54.76 hours per employee. In 1997 he calculated 49.61 hours absent per employee. For 1998 he projected 69.64 hours absent per employee.

The final report has stated the benchmarks of Absenteeism before and at the completion of the project. The final report had stated that the rate of absenteeism at completion of the project was 2.62%. The stated numbers by Mr. Piccinini for 1997 divided by 1880 available hours' equals 2.64%. The projected numbers stated for 1998 are not as favorable but it is very difficult to project absenteeism therefore it's best to use actual numbers.

# 5. Maryland Clothing is not going to dismantle the team concepts.

Mr. Piccinini feels that too much time and expense has been spent to consider the dismantling of the team concept. He feels the unique situations of his plants' personnel dictates different approaches to the team concept and that he wishes to modify the pay procedures while still receiving the overall advantages of Teams.

Date: July 23, 1998

To: Gus Piccinini

MARYLAND CLOTHING MFG.

From: Paul "Stew" Stewart

**CHARLES GILBERT ASSOCIATES** 

Re: Verification of metrics for Final Report Phase II

Gus please review, the numbers that are used to set the metrics of Phase I & II for the Installation of modular work teams, Exhibit VI of the Final Report. Please keep in mind, the descriptions of the metrics may be in different terms than you would normally use. We have attempted to keep the terms used in the proposal by Charlie. Exhibit VI from the Final Report is a spreadsheet done in "EXCEL". You will need a copy of it for continuous reference. Gus, thank you for your efforts and I hope you will relax and enjoy your vacation.

#### DAYS IN PLANT

During the 1<sup>st</sup> week of June 1998 a physical count was made. There were 4080 units (8.5 days at 480 per day) cut but not shipped. There were 782 units in cutting, 2640 units (5.5 days at 480 per day) in sewing & finishing, and 658 in shipping.

During the 1<sup>st</sup> week of July 1997 a physical count was made. There were 6624 units (13.8 days) cut but not shipped. There were 2714 units in cutting, 3888 units (8.1 days) in sewing & finishing, and 22 units in shipping.

Before Phase I began the base data collected show 18.5 days (8880 units) total days. There were 12.7 days (6096 units) in sewing. Also reported from the data collected was WIP as 8166 units. Since, WIP does not include Shipping, there were 714 units (8880-8166) in shipping and 2070 units (8166-6096) in cutting.

## **UNIT VOLUME FIGURES**

# Coats per Week

During May 1998 the units shipped totaled 9,139. There were 19 production days during May. Units divided by days equaled 481 units per day. Units per day times 5 equals 2405 Pieces Produced per Week.

During June 1997 the units shipped totaled 9,539. There were 20 production days during June. Units divided by days equaled 477.4 units per day. Units per day times 5 equals 2387 Pieces Produced per Week.

During the 3<sup>rd</sup> Quarter 1996 the units shipped totaled 21,052. There were 53 production days during that quarter. Units divided by days equaled 397 units per day. Units per day times 5 equals 1985 Pieces Produced per Week.

WIP (The number pieces Cut but not Finished)

During the physical count made in June 1998, 4080 units were cut not shipped minus 658 units in shipping equals 3422 WIP.

During the physical count made in July 1997, 6624 units were cut not shipped minus 22 units in shipping equals 6602 WIP.

The data collected before Phase I began reported the **WIP** as **8166.** (As stated earlier, 8880 units cut not shipped minus 714 units in shipping)

#### **HOURS & S's PER COAT**

Before Jan. 1997, during the 4 <sup>th</sup> Quarter 1996, there were 24,912 units shipped. Units divide the hours and dollars. There were hours (hrs per coat) and (specific per coat). Neither hours nor dollars for the quarter include Vacation and Holiday or Cutting Room. In the Final Report, these are reported as indexes. Therefore, the quotient (see Section ) is divided by itself to produce an Index of 1.
Phase II hours and dollars per coat were calculated from weeks ending 5/2/98 through 5/30/98. There were 11,658 units shipped during those weeks. There were hours equaling to hours per coat. Divide hrs per coat by the quotient equals an Index of 0.869. There were paid equaling per coat. Divide per coat by the quotient per coat by the quotient equals an Index of 0.903.

# **ACTUAL THROUGHPUT HOURS**

The Goal set before Phase I began was to have the throughput hours down to 40. The number of teams prorated the Goal in each Phase. Phase I Goal was set at 16 and Phase II was set at 24.

In **June 1998**, there were 2430 units actually started by sewing and not finished. At 480 units per day it would take 5.06 days (40.5hrs) to complete the further most bundle. Phase I teams had 415 units (6.9 hrs) and Phase II teams had 2020 units (33.6hrs)

There was a count, of bundles started into sew, during the 1<sup>st</sup> week of July 1997. There were 54 bundles (10.8 hrs) in Phase I teams. Phase II teams had 324 bundles (54 hrs), which makes the total equal 64.8.

Before the installation of any modules the Throughput hours were monitored for a particular bundle. This bundle was actually timed from the 1<sup>st</sup> sewing operation until it was completed through Final Exam. The total time was 72 production hours. Phase I teams were assigned 28.8 hours and Phase II teams had 43.2 hours.

# **TURNOVER**

Exhibit XI from the Final Report will help to explain the number of quits and hires per quarter. The only questionable assignment is whether the quit was assigned to a team. If a quit occurred during or after the quarter that a team was ready to go live, would determine if it was a **Team** or **NonTeam quit**. The numbers in the final report were taken from Quarterly Reports. If an employee's QTR \$'s equals the YTD \$'s and it's not the 1st Quarter of the year then that employee was hired that quarter. If an employee's QTR \$'s is equal to .00 then that employee quit the previous quarter. The 1st Quarter of a year can be compared to the previous 4th Quarter to record changes in hires during the 1st and quits during the 4th. The fallacy of this technique, if an employee is rehired the same quarter that she quit then it may not be recognized as either.

## ABSENCE

The **Previous Percent Absence**, is a percent of the number of available hours for the 4<sup>th</sup> Quarter 1996, which was determined by multiplying the weeks available by hours per week. Holiday and vacation hours are included if they are eligible. The summation of hours paid from the Quarterly Report (includes holidays hour paid) is subtracted from the available hours then divided by hours available times 100 which equals **6.31** %.

In **June 1998**, the percentage absence for all Teams was calculated by the following weighted percentage:

Team #	Available Hrs	Missed Hrs	% Absence
#2	6885.00	269.25	3.91%
#3	5757.00	82.75	1.44%
#4	1458.00	79.00	5.43%
#5	2800.00	82.25	2.94%
#6	2280.00	94.50	4.14%
#7	5760.00	210.75	3.66%
#8	9260.00	250.25	2.70%
#9	6680.00	73.50	1.10%
#10	6120.00	87.50	1.43%
Total	47000.00	1229.75	2.62%